Time: 60 minutes

Please fill in the following information with a ball-point pen:

STUDENT NAME

S P JAIN'S REGISTERED APPLICATION NUMBER: _____ (IF APPLIED ELSE YOUR EMAIL ID) _____

Please read instructions in the answer sheet and question booklet before answering

1. There will be negative marking as per indication in each section (Total no. of Sections : 6)

2. Please check the number of questions before you start answering

3. All rough work to be done only on the blank sheet provided at the back of the question booklet. Please do NOT write on the question paper

4. Laptops, calculators, slide rules, log tables, watch calculators, papers, cellular phones etc are not allowed inside the examination hall

5. You will not be allowed to leave the examination hall during the examination

6. This objective type exam is for 60 minutes

7. Any candidate found violating the instructions and receiving/giving any form of help will be disqualified

The decision of S P Jain will be final and binding on the applicant in case of any dispute.

Signature of Invigilator

APPROPRIATION OF MARKS

Section	No. of Questions	Marks per question	Total Marks per Section	Negative Marking per question
Diagrammatic Reasoning	7	3	21	1
Logic	5	2	10	0.5
IQ	5	2	10	0.5
Numeracy	10	3	30	1
Reading Comprehension	5	3	15	1
GK Questions	14	1	14	2
Total	**46**		**100**	

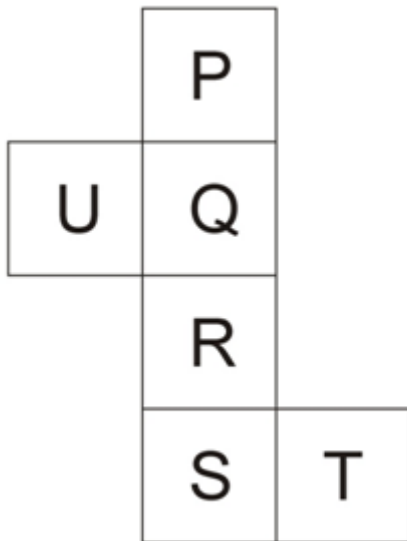ANSWER FOR THE QUESTIONS ARE PROVIDED AT THE END OF THE PAPER

DIAGRAMMATIC REASONING (7Q x 3 marks = 21 marks. Negative marking – 1 mark)

1. The below figures are in a logical series. Out of the options A, B, C, D and E what comes next in the series?
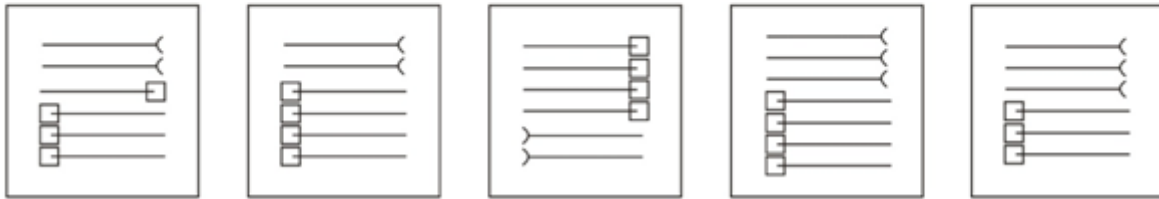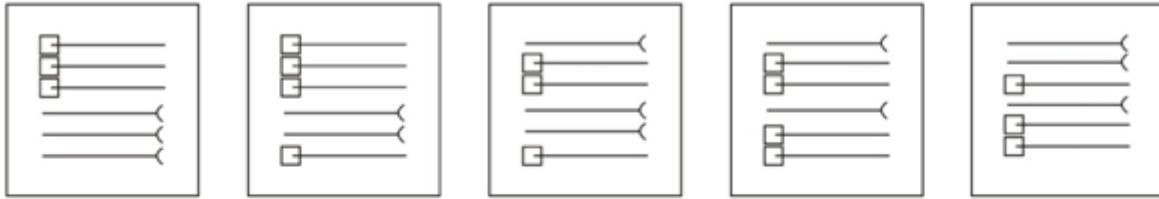
| A | B | C | D | E |

2. On folding the paper given below into the shape of a cube (dice) which letter would lie opposite T?


(A) P
(B) Q
(C) S
(D) U

3. Given below to the left is a figure which has two dots placed in it according to a particular logic. Identify out of the options A, B, C, D and E in which figure two dots can be placed using a similar logic?

| A | B | C | D | E |
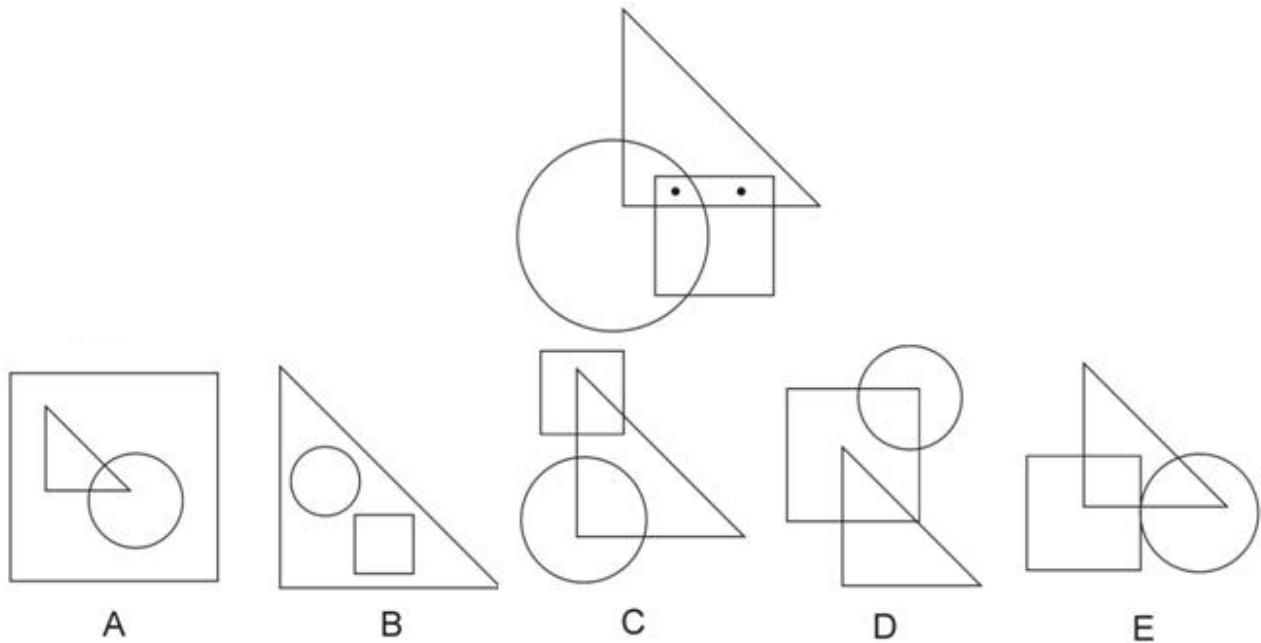
4. Select an option from A,B,C,D or E , the contents of which may replace the question marks in the problem diagram given below such that figure III is related to figure IV in the same way as figure I is related to figure II?

NA	LM	LF	TK	WM
I IV	I IV	I IV	I IV	I IV
A	B	C	D	E
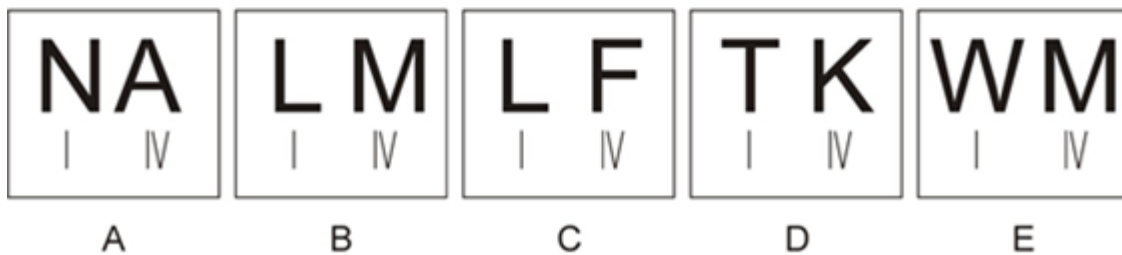
5. Find out which one of the options A, B, C, D or E replaces the question mark in the figure matrix given below?

| A | B | C | D | E |
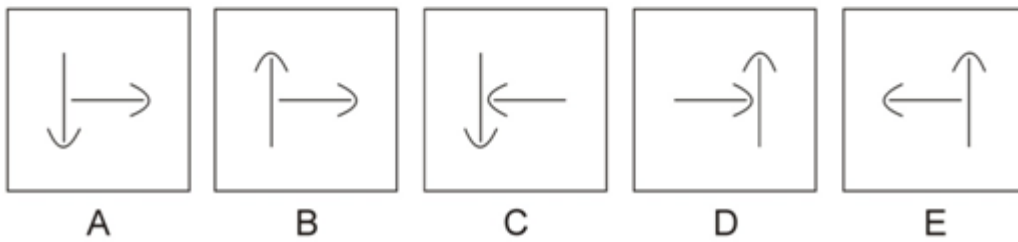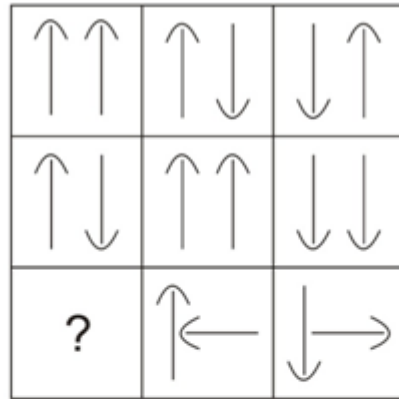
6. Choose the correct mirror image of the below figure from amongst the 5 options A, B, C, D and E.

| A | B | C | D | E |
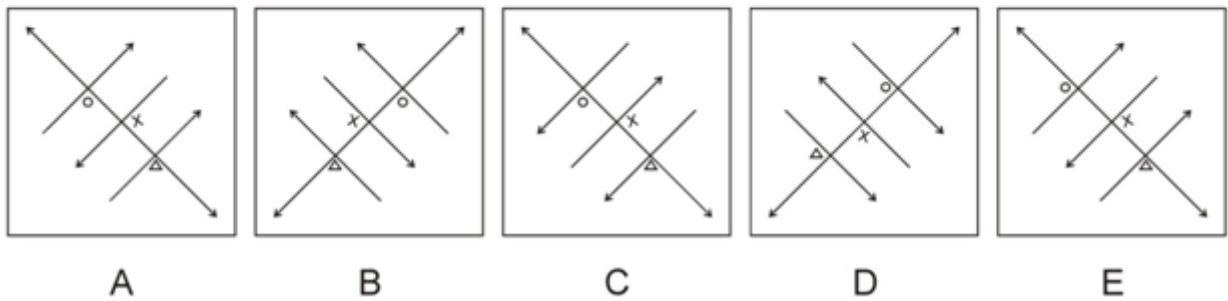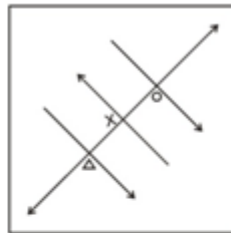
7. What is the minimum number of straight lines needed to construct the below figure?

(A) 15
(B) 13
(C) 12
(D) 11

LOGIC (5Q x 2 marks = 10 marks. Negative marking – 0.5 mark)

Five travellers P,Q,R,S and T came from five different countries (Algeria,Belgium, Canada, Denmark and Egypt not necessarily in the same order) to visit the country of Pantina. 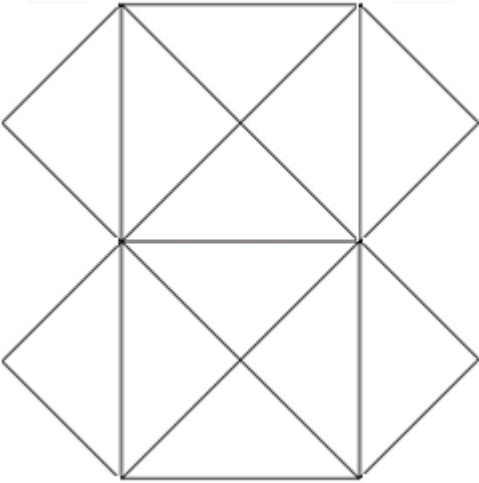They each flew on a different airline out of V,W,X,Y and Z (not necessarily in the same order). As all the five travellers were staying at the same hotel they met up at the hotel café and were discussing which country they were from and which airline they had flown in on. At the end of their discussion the following information was available.

- T is not from Canada
- Q is not from Egypt
- The airline that the traveller from Canada flew on was not X
- The airline that the traveller from Algeria flew on was neither V nor Z
- Travellers P and Q both are not from Canada or Denmark
- Travellers P and Q both did not fly on either airline W or X
- S is not from either Algeria or Egypt
- The traveller who flew on airline W is neither from Denmark nor Canada
- Neither R nor T flew on airline V or W and neither of them is from Belgium or Egypt

1. The traveller who flew on airline V is from which country

    (A) Denmark
    (B) Egypt
    (C) Algeria
    (D) Canada

2. Which traveller is from Denmark?

    (A) T
    (B) S
    (C) R
    (D) Q

3. Which airline did the traveller from Canada fly?

    (A) V
    (B) X
    (C) Y
    (D) Z

4. Which of the following is true?

    (A) P is from Algeria
    (B) T flew on airline Z
    (C) S is from Belgium
    (D) All of the above statements are true

5. Which traveller flew on airline X?

    (A) P
    (B) R
    (C) S
    (D) T

IQ (5Q x 2 = 10 marks. Negative marking – 0.5 mark)

1. Given below is a familiar saying with all the vowels as well as some of the spacing between words removed . Provide the complete saying as the answer

   TMND TDWT FR NMN

2. Out of the below numbers which is the odd one out?

   4150, 6244, 4536, 1708, 5234, 3012, 1102, 1480

3. If CANDLE is coded as DCQHQK then how is SHADOW coded in that language?

4. If 17th May 2012 was a Thursday, what will be the day on 22nd June 2013?

5. What should replace the question mark in the below table?

| 45	21	12
24	9	33
15	24	?

NUMERACY (10Q x 3 = 30 marks. Negative marking – 1 mark)

1. Solve the following equation:

$$\frac{1}{1+b^{(y-x)}} + \frac{1}{1+b^{(x-y)}} = ?$$

   (A) 1
   (B) 1/2
   (C) $b^{(x-y)}$
   (D) $b^{(x+y)}$

2. From a pack of 52 cards, two cards are drawn together at random. What is the probability of both the cards being queens?

   (A) 1/52
   (B) 1/4
   (C) 3/221
   (D) 1/221

3. Two trains of equal lengths take 20 seconds and 30 seconds respectively to cross a telegraph post. If the length of each train is 240 metres, in what time (in seconds) will they cross each other travelling in opposite directions?

   (A) 20
   (B) 24
   (C) 15
   (D) 10

4. A Mother's age after 6 years will be thrice the age of her daughter now. The sum of their ages 6 years ago was 42. What is the ratio of the current ages of the mother and the daughter?

   (A) 18:7
   (B) 7:5
   (C) 6:1
   (D) 13:5

5. What will be the least number which when quadrupled will be exactly divisible by 24, 36, 42 and 60?

   (A) 630
   (B) 1260
   (C) 315
   (D) 420

6. What will be the remainder when 248^{1259} is divided by 5?

   (A) 3
   (B) 4
   (C) 1
   (D) 2

7. If the shaded area is one half the area of triangle ABC and angle ABC is a right angle, then the length of line segment AD is equal to which of the options
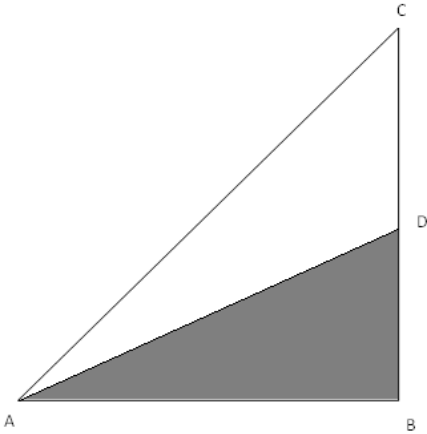
AC = p
AB = q
BD = r
DC = s

   (A) 1/2p
   (B) $\sqrt{p^2 - 3r^2}$
   (C) $\sqrt{2q^2 + s^2}$
   (D) $\sqrt{q^2 + r^2}$

8. Given below are two columns. Determine the relationship between them based on the information given below

Column A	Column B
The sum of the odd numbers from 1 to 99 inclusive	50 x 56

(A) The quantity in column A is greater
(B) The quantity in column B is greater
(C) The two quantities are equal
(D) The relationship cannot be determined from the information given

Questions 9 and 10 are on the chart given below

A survey was conducted among students of 5 schools. Students were asked which television channel out of channel 1, channel 2, channel 3, channel 4 and channel 5 they watch the most. It is known that each student of the schools answered by selecting only one of the channels.
Given below is a chart tabulating their answers.
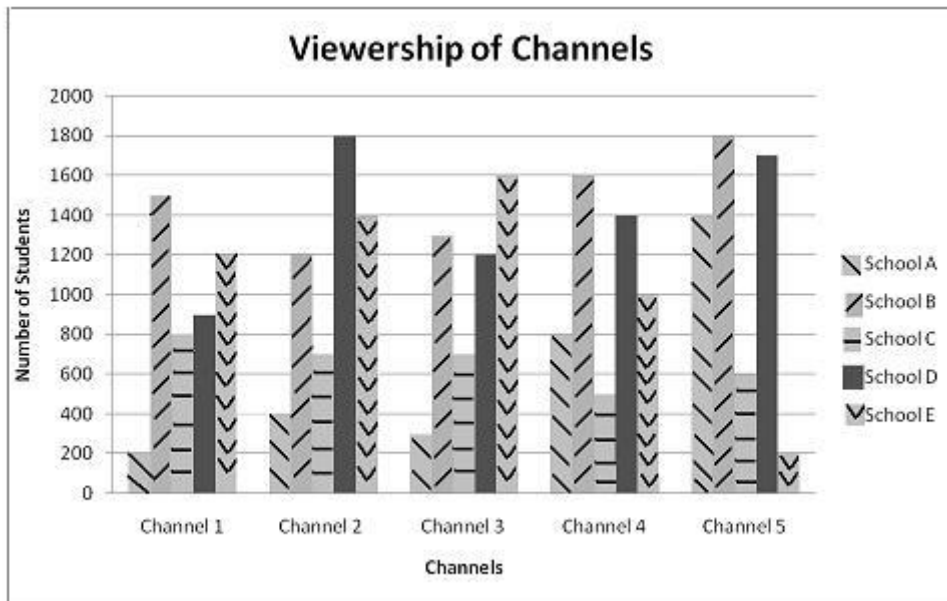
9. Which school has the least number of students?

    (A) School A
    (B) School B
    (C) School C
    (D) School D

10. Which Channel has been selected by the most number of students across the five schools as their most viewed channel?

    (A) Channel 1
    (B) Channel 2
    (C) Channel 4
    (D) Channel 5

READING COMPREHENSION (5Q x 3 = 15 marks. Negative marking – 1 mark)

Two systems can be said to have dominated the 20th century: the capitalist system and the socialist system. However, this judgment is not self- evident. It usually encounters three objections.

The first objection is that it is exaggerated and unjustified to mention the socialist system alongside the capitalist system, almost in parallel with it. In terms of world history, the socialist system was a brief interlude, a temporary aberration in the course of historical events. That view could well be the one that historians take in 200 years, but it is not the way we who live in the 20th century see things. The establishment, existence and partial collapse of the socialist system have left a deep and terrible scar on this century. The socialist system persisted for quite a long time and still persists in some form in the world's most populous country, China. Its rule extended, at its height, over a third of the world's population. The Soviet Union was considered a superpower, possessed of fearful military might. The socialist system weighed not only on the hundreds of millions who were subject to it, but on the rest of the world's population as well.

The second objection questions whether there were only two systems. Is it not possible to talk of a third system that is neither capitalist nor socialist? I am not enquiring here into the question of whether it might be desirable to establish some kind of third system. I do not know what the 21st or 22nd century may bring. That can be said for sure is that the 20th century has not given rise to a distinctive third system.

The third objection delves further into the second, but from a different direction. Why do I speak of a single kind of "socialist system"? Certainly, the socialist system in the Soviet Union differed under Stalin and Khrushchev, both of which differed from Janos Kaddr's Hungarian socialism or from the Polish socialism of Gomulka. Similarly, why do I speak of a single kind of capitalist system which includes the arrangements in today's United States and Sweden.

These questions raise a fundamental problem of interpretation and classification. I suggest using "system" as a comprehensive and aggregate concept, and admit that each system exists in specific historical **_manifestations_** of various kinds. We are not facing an issue of choosing words arbitrarily; rather, the language (system versus historical manifestation) is based on generalization from observing history. The conceptual framework is admissible provided that the following three assertions can be confirmed.

1) The various historical manifestations of capitalism have common characteristics, so that they can legitimately be interpreted as variants of the same system. Similarly, the various historical manifestations of socialism have common characteristics, and therefore they can be regarded as variants of the same socialist system. Let us call these common characteristics the system-specific attributes of each system.

2) The system-specific attributes are sufficiently important to influence deeply the realities of society, politics, the economy, culture and daily life.

3) The system-specific attributes provide the essential criteria for distinguishing between the two great systems

1. What is the tone of the above passage?

   (A) Analytical
   (B) Lamenting
   (C) Descriptive
   (D) Candid
   (E) Opinionated

2. What is the meaning of the word 'manifestations' as used in the above passage?

   (A) Interpretations
   (B) Exhibitions
   (C) Corruptions
   (D) Explanations
   (E) Descriptions

3. According to the passage what is the first objection raised to the assertion that two economic systems dominated the 20th century?

   (A) That the socialist system was far more dominant than the capitalist system during the 20th century as can be seen in the reverence the world had for the Soviet Union
   (B) That there really is no one version of either capitalist or socialist system so it is difficult to compare the two systems
   (C) That due to the collapse of the socialist system it should be treated as a brief deviation from the capitalist system rather than a competing system
   (D) That the effects of socialist system were felt not only by people living in socialist countries but by people across the world
   (E) None of the other options

4. What is the main purpose of the above passage?

   (A) To highlight how the capitalist system triumphed over the socialist system over the last two hundred years
   (B) To provide a framework for comparison of the capitalist and socialist systems
   (C) To bring to the attention of the reader that capitalism and socialism were the only two systems that dominated the 20th century
   (D) To provide a defense for the socialist system to be treated as a competing system to the capitalist system rather than a temporary aberration
   (E) None of the other options

5. Which of the following has NOT been mentioned in the above passage?

   (A) The different occurrences of the capitalist system have shared enough characteristics for capitalism to be interpreted as a distinct system
   (B) The attributes of both capitalist and socialist systems have affected society and politics
   (C) No third system distinct from the capitalist and socialist systems emerged during the 20th century
   (D) At its peak over a third of the world's population was under a socialist system
   (E) All of the above statements have been mentioned in the passage

GENERAL KNOWLEDGE (14Q x 1 = 14 marks. Negative marking – 2 marks)

Mark True (T) or False (F)

1. Li Keqiangis the current Chinese Premier. T F

2. H. J Heinz Co. sold a majority stake to Berkshire Hathaway along with 3G T F
   Capital.

3. Renminbi is the currency of China. T F

4. Steven Spielberg won the Oscar for Best Director for the movie Lincoln at the T F
   2013 Academy Awards.

5. On May 3, 2013 the Dow Jones (US stocks) index crossed 15,000 for the first T F
   time ever.

6. Yoon Boo-keun and Shin Jong-kyun were appointed as Co-CEO's of Samsung T F
   Electronics in March 2013.

7. Barisan party, that has Najib Rajak as the prime minister, recently lost the general T F
   elections in Malaysia.

8. Audi has taken over as the number one luxury car maker in the fast growing T F
   Indian car market.

9. Tiger Woods has returned to being number one in the Official Golf Ranking. T F

10. The Australian Securities Exchange (ASX) is Australia's primary securities T F
    exchange.

11. Fuleco is the mascot for the 2014 football World Cup in Brazil. T F

12. In April 2013 technology company Apple reported its first quarterly decrease in T F
    profit over the last ten years

13. John Kerry is the current Vice President of the United States of America T F

14. The 21st ASEAN summit was held in Cambodia in November 2012. T F

ANSWERKEY FOR SPJAT SAMPLE PAPER 4

DIAGRAMMATIC REASONING

1	B
2	D
3	A
4	C
5	B
6	C
7	B

NUMERACY

1	A
2	D
3	B
4	D
5	A
6	D
7	D
8	B
9	A
10	D

LOGIC

1	B
2	A
3	D
4	C
5	D

READING COMPREHENSION

1	A
2	B
3	C
4	B
5	E

IQ

1	TIME AND TIDE WAIT FOR NO MAN
2	1480
3	TJDHTC
4	SATURDAY
5	9

GK

1	T
2	T
3	T
4	F
5	T
6	T
7	F
8	T
9	T
10	T
11	T
12	T
13	F
14	T